

## AMENDMENTS TO THE CLAIMS:

The Group-IV method claims 30 to 33 are provisionally elected for further prosecution; please cancel composition claims 1, 2, 7 to 12, 14, 16, 17, 20, 21, and 44 to 49 without prejudice, add new claims 50 to 58, and amend claims 3, 4, 6, 13, 15, 18, 19, 22 to 26, 28, 30, 32, 34, 35, and 37 as follows:

Claims 1 to 2. (canceled)

3. (currently amended) The cosmetic composition as defined in claim ~~[[1]]~~ 57, wherein the pH is from 3.5 to 8.

4. (currently amended) The cosmetic composition as defined in claim ~~[[1]]~~ 57, wherein the composition is a hair treatment composition.

Claim 5. (canceled)

6. (currently amended) The cosmetic composition as defined in claim ~~[[1]]~~ 57, wherein the ascorbate oxidase ~~enzyme~~ belongs to the Enzyme Commission class [1.10.3.3] and is of plant origin.

Claims 7 to 12. (canceled)

13. (currently amended) The cosmetic composition as defined in claim ~~[[1]]~~ 57,

wherein the ascorbate oxidase enzyme is stabilized by an enzyme stabilizing substance and said enzyme stabilizing substance is selected from the group consisting of buffers, glycerol, polyhydroxy compounds, metal chelating agents, thiols, polyethylene glycol and nonreactive proteins.

Claim 14. (canceled)

15. (currently amended) The cosmetic composition as defined in claim ~~[[14]]~~ 57, wherein the ascorbate oxidase is covalently attached ~~immobilization is made by covalently attaching the enzyme to a solid support~~ and said solid support is selected from the group consisting of microparticles of surface-modified silica, alumina, glass, oxirane-modified polymethacrylate, carboxyalkylcellulose, aminoalkylsilica, aminoalkyl glass, aminoalkyl cellulose, carboxyalkyl cellulose, dialkylamino-substituted cellulose, polyethylene glycol, polyacrylic acid, polyvinyl alcohol, polyethyleneimine, dextran, gelatin and uricase.

Claims 16 and 17. (canceled)

18. (currently amended) The cosmetic composition defined in claim ~~[[1]]~~ 57, wherein said at least one compound is present as an anhydrous powder, a granulate, a coated material, a tablet, or is micro-encapsulated.

19. (currently amended) The cosmetic composition as defined in claim ~~[[1]]~~ 57,

wherein the at least one cosmetic ingredient is selected from the group consisting of thickening agents, wetting agents, emulsifiers, opacifiers, alcohols, sugars, solubilizers, stabilizers, buffering substances, perfume oils, dyes, hair care components, UV-filters, betaine, lanolin, lanolin derivatives, protein derivatives, protein hydrolysates, amino acids, cholesterol, pantothenic acid, vitamins, provitamins and plant extracts.

Claims 20 to 21. (canceled)

22. (currently amended) The cosmetic composition as defined in claim ~~[[1]]~~ 57, consisting of a hair fixing composition for permanently shaping hair.

23. (currently amended) The cosmetic composition as defined in claim ~~[[1]]~~ 57, consisting of an aqueous solution.

24. (currently amended) A method for preparing a ready-to-use cosmetic composition for oxidative treatment of skin or hair, said method comprising the steps of:

(i) providing a component (A) comprising at least one compound and at least one cosmetic ingredient, said at least one compound being selected from the group consisting of ascorbic acid, ascorbic acid derivatives and ascorbic acid salts;

(ii) providing a component (B) comprising an oxygen-utilizing ascorbate

~~oxidase that catalyzes enzyme, said enzyme catalyzing enzymatic oxidation of~~  
~~said at least one compound and consisting of an oxygen-utilizing ascorbate~~  
~~oxidase;~~

- (iii) providing a component (C) comprising oxygen;
- (iv) mixing the component (A) and the component (B) for about 1 minute to about 20 minutes before application to the skin or the hair to form a mixture; and
- (v) mixing the component (C) intensely with the mixture of the component (A) and the component (B) so as to form dehydroascorbic acid in the ready-to-use composition by said enzymatic oxidation.

25. (currently amended) A method for preparing a ready-to-use cosmetic composition for the oxidative treatment of skin or hair, said method comprising the steps of:

(i) providing a component (A'), said component (A') comprising in dry solid form:

at least one compound selected from the group consisting of ascorbic acid, ascorbic acid derivatives and ascorbic acid salts;

an enzyme that catalyzes enzymatic oxidation of said at least one compound and that consists of an oxygen-utilizing ascorbate oxidase; and  
at least one cosmetic ingredient;

(ii) providing a component (B'), said component (B') comprising an aqueous or aqueous-alcoholic composition;

(iii) providing a component (C') comprising oxygen;

(iv) mixing the component (A') and the component (B') for about 1 minute to about 20 minutes before application to the skin or the hair to form a mixture; and

(v) allowing component (C') to come into contact intensely with the mixture of the component (A') and the component (B') so as to form dehydroascorbic acid in the ready-to-use composition by said enzymatic oxidation.

26. (currently amended) The method as defined in claim 24 or 25, wherein the component (C) and said component (C') are each ~~oxygen is present in the form of air, purified oxygen gas, an oxygen containing mixture or~~ an ~~any other oxygen~~ gas releasing compound.

27. (previously presented) The method as defined in claim 24 or 25, wherein said allowing of said component (C) or said component (C') to come into contact intensely with said mixture is carried out in a pressurized container.

28. (currently amended) The method as defined in claim 24 or 25, wherein said allowing of said component (C) or said component (C') to come into contact intensely with said mixture is carried out in the ~~presence of a solution of one or~~ more anionic, cationic, zwitterionic or nonionic surfactants appropriate to provide an oxygenated foam.

Claim 29. (canceled)

30. (currently amended) A method for the oxidative treatment of keratin, said method comprising the steps of:

(a) providing a cosmetic composition comprising at least one compound, at least one cosmetic ingredient[;], and an oxygen-utilizing ascorbate oxidase an enzyme that catalyzes enzymatic oxidation of said at least one compound; ~~[[and]]~~ said at least one compound being selected from the group consisting of ascorbic acid, ascorbic acid derivatives and ascorbic acid salts[;]] ~~wherein said enzyme consisting of an oxygen-utilizing ascorbate oxidase;~~

(b) adding oxygen to said cosmetic composition so as to form dehydroascorbic acid in the cosmetic composition by said enzymatic oxidation;

~~[[b)]]~~ (c) after forming the dehydroascorbic acid in step b), applying said cosmetic composition to the keratin,

~~[[c)]]~~ (d) allowing said cosmetic composition containing the dehydro-ascorbic acid to act on the keratin for a sufficient time to perform said oxidative treatment, and then

(d) rinsing the keratin.

31. (previously presented) The method as defined in claim 30, in which the keratin is hair.

32. (currently amended) The method as defined in claim 30, in which the oxidative treatment is ~~[[a]]~~ an oxidative post treatment of reduced hair in a

process of permanent shaping of the hair.

33. (previously presented) The method as defined in claim 30, in which the sufficient time in step (c) is from about 5 minutes to about 25 minutes.

34. (currently amended) A method for permanently shaping hair, said method comprising the steps of:

- a) bringing the hair into a desired shape;
  - b) applying a keratin-reducing composition to the hair and allowing the keratin-reducing composition to act on the hair for a period of action sufficient for the permanent shaping of the hair;
  - c) rinsing the hair after the applying and the allowing of step b);
  - d) providing an oxidative hair fixing composition;
  - e) after the rinsing of step c), applying said oxidative hair fixing composition to the hair and allowing said oxidative hair fixing composition to act on the hair for a time sufficient for fixing of the hair in the desired shape; and
  - f) after the applying and the allowing of step e), rinsing the hair again;
- in which said oxidative hair fixing composition comprises at least one compound selected from the group consisting of ascorbic acid, ascorbic acid derivatives and ascorbic acid salts; oxygen; an oxygen-utilizing ascorbate oxidase that catalyzes enzymatic oxidation of said at least one compound with said oxygen to form dehydroascorbic; the dehydroascorbic acid formed by said enzymatic oxidation; and at least one cosmetic ingredient.

35. (currently amended) A method for permanently waving hair, said method comprising the steps of:

- a) bringing the hair into a desired shape;
- b) applying a keratin-reducing composition to the hair and allowing the keratin-reducing composition to act on the hair for a period of action sufficient for the permanent waving of the hair;
- c) rinsing the hair after step b);
- d) providing an oxidative hair fixing composition;
- e) after the rinsing of step c), applying said oxidative composition as a pre-fixing composition to the hair and allowing said oxidative pre-fixing composition to act on the hair for a time sufficient for pre-fixing the hair; and
- f) after the pre-fixing of the hair of step e), treating of the hair with an oxidative post-fixing composition for post-fixing the hair, said oxidative post-fixing composition containing from 0.1 to 1 percent by weight of hydrogen peroxide or from 1 to 5 percent by weight of bromate as oxidizing agent;

in which said oxidative hair fixing composition comprises at least one compound selected from the group consisting of ascorbic acid, ascorbic acid derivatives and ascorbic acid salts; oxygen; an oxygen-utilizing ascorbate oxidase that catalyzes enzymatic oxidation of said at least one compound with said oxygen to form dehydroascorbic acid; the dehydroascorbic acid formed by said enzymatic oxidation; and at least one cosmetic ingredient.



36. (original) The method as defined in claim 35, wherein said oxidative pre-fixing composition is a solution and has a pH of 3.5 to 9.

37. (currently amended) The cosmetic composition as defined in claim ~~[[1]]~~ 57, wherein said at least one cosmetic ingredient is at least one wetting agent or emulsifier selected from the group consisting of cationic surface-active substances, anionic surface-active substances, amphoteric surface-active substances and nonionic surface-active substances.

38. (previously presented) The cosmetic composition as defined in claim 37, wherein said at least one wetting agent or emulsifier is selected from the group consisting of fatty alcohol sulfates, fatty alcohol ether sulfates, alkylsulfonates, alkylbenzene-sulfates, quaternary ammonium salts, alkylbetaines, ethoxylated alkylphenols, fatty acid alkanolamides and ethoxylated fatty esters.

39. (previously presented) The cosmetic composition as defined in claim 19, wherein said thickening agents comprise bentonite, kaolin, fatty acids, starch, guar gum, fatty alcohols, polyacrylic acid, polyacrylic acid derivatives, cellulose derivatives, alginates, petrolatum and paraffin oils.

40. (previously presented) The cosmetic composition as defined in claim 19, wherein said alcohols comprise ethanol, propanol, isopropanol, ethylene glycol, 1,2-dihydroxypropane, 1,3-dihydroxypropane, 1,2-dihydroxybutane,

1,3-dihydroxybutane, 1,4-dihydroxybutane, 1,2-dihydroxypentane, 1,3-dihydroxypentane, 1,4-dihydroxypentane, 1,5-dihydroxypentane and glycerol.

41. (previously presented) The cosmetic composition as defined in claim 19, wherein said hair care components comprise cationic polymers, silicone polymers and cationic silicone polymers.

42. (previously presented) The cosmetic composition as defined in claim 19, wherein said opacifiers comprise polyethylene glycol esters.

43. (previously presented) The cosmetic composition as defined in claim 13, wherein said enzyme stabilizing substance is one of said buffers.

Claims 44 to 49. (canceled)

50. (new) The method as defined in claim 30, wherein said cosmetic composition contains from 0.1 to 20 percent by weight of said at least one compound and from 1 to 2000 ppm of said oxygen-utilizing ascorbate enzyme.

51. (new) The method as defined in claim 30, wherein said cosmetic composition applied to the keratin has a pH from 3.5 to 8.

52. (new) The method as defined in claim 51, wherein said cosmetic composition contains a buffer.
53. (new) The method as defined in claim 51, wherein said cosmetic composition contains a surfactant and said adding of said oxygen includes producing an oxygen-containing foam with the help of said surfactant.
54. (new) The method as defined in claim 51, wherein said at least one cosmetic ingredient comprises perfume oil, a surface-active substance and a buffer.
55. (new) The method as defined in claim 34, wherein said oxidative hair fixing composition has a pH of 3.5 to 8 and contains perfume oil, a buffer, from 0.1 to 20 percent by weight of said at least one compound, and from 1 to 2000 ppm of said oxygen-utilizing ascorbate enzyme.
56. (new) The method as defined in claim 35, wherein said oxidative hair fixing composition has a pH of 3.5 to 8 and contains a buffer, perfume oil, a surfactant, and 0.2 to 30 % by weight of an emulsifier or wetting agent, from 0.1 to 20 percent by weight of said at least one compound, and from 1 to 2000 ppm of said oxygen-utilizing ascorbate enzyme.
57. (new) A ready-to-use cosmetic composition comprising
- (a) from 0.1 to 20 % by weight of at least one compound selected from the

group consisting of ascorbic acid, ascorbic acid derivatives and ascorbic acid salts;

(b) from 1 to 2000 ppm of an oxygen-utilizing ascorbate oxidase that catalyzes enzymatic oxidation of said at least one compound;

(c) oxygen;

(d) dehydroascorbic acid formed by said enzymatic oxidation of said at least one compound with said oxygen in the presence of said ascorbate oxidase; and

(e) at least one cosmetic ingredient.

58. (new) The composition as defined in claim 57, containing from 0.5 to 10 percent by weight of said at least one compound and from 2 to 500 ppm of said ascorbate oxidase.